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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,481	11/28/2000	Dave McDysan	RIC-000-42	7586

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MCI, INC
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EXAMINER

BATES, KEVIN T

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/723,481

Applicant(s)

MCDYSAN ET AL.

Examiner

Kevin Bates

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Application is in response to a communication made on June 16, 2005.

Claims 1-50 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 1, line 8, claim 26, line 6, and claim 50, lines 12 and 16, the claim says that PAD sends identified messages to the external processor, while the PAD may identify packets and route identified packets, there is no disclosure of identifying a message at the PAD.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 8 of claim 1, line 6 of claim 26, and lines 12 and 16 of claim 50, the claim states that the PAD passes an identified message. The claim reads that it identifies

packets not messages and there is no indication that this message is the packet, part of the packet, or a message relating anything to an identified packet, it is unclear on what the message is and how it was identified.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Alles (6466976).

Regarding claim 1 and 26, Alles discloses a access device for use in a programmable access device (Column 2, lines 41 – 43), said access device comprising: first and second network interfaces through which packets are communicated with a network (Figure 3, elements 310 and 320); a packet header filter (Column 10, lines 36 – 47) and a forwarding table, wherein the forwarding table is utilized to forward packets between the first and second network interfaces (Column 10, lines 59 – 65), and wherein said packet header filter identifies messages received at to one of the first and second network interfaces on which policy-based services are to be implemented (Column 10, lines 36 – 47) and passes identified messages via a message interface to

an external processor included in said network access system for implementation of the policy-based services by the external processor (Column 9, lines 53 – 55; Column 10, lines 57 – 59), wherein said packet header filter passes all other received messages through the packet header filter to another processor (Column 10, lines 31 – 32).

Regarding claim 2 and 27, Alles discloses that the packet header filter receives packets directly from the first network interface (Column 10, lines 36 – 47).

Regarding claims 4 and 29, Alles discloses that the packet header filter filters packets for service processing based upon protocol information pertaining to protocol layers higher than layer 3 (Column 10, lines 39 – 42; Column 8, lines 38 – 41).

Regarding claim 5 and 30, Alles discloses a policer that polices packets by reference to traffic parameters (Column 13, lines 16 – 20).

Regarding claims 6 and 31, Alles discloses that the policer comprises a marker that marks packets that do not conform with the traffic parameters (Column 13, lines 10 – 20).

Regarding claim 15 and 39, Alles discloses a control interface through which said packet header filter and said forwarding table are programmed (Figure 4, elements 470 and 420; Column 11, line 63 – Column 12, line 10).

Regarding claims 7, 16, 32, and 40, Alles discloses at a least a usage monitor that monitors at least one traffic type (Column 8, lines 38 – 41).

Regarding claims 8 and 33, the combination of Alles discloses the usage monitor has an associated threshold that when exceeded generates a reporting event for the usage monitor (Column 13, lines 1 – 20, where if the service rules are violated, the

monitors initiates decrementing the TOS using the classifier, thus the external processor).

Regarding claims 9 and 34, the combination of Alles discloses that a reporting interface that communicates the reporting event to an external processor (Column 13, lines 1 – 20, where if the service rules are violated, the monitors initiates decrementing the TOS using the classifier, thus the external processor).

Regarding claims 10 and 35, the combination of Alles discloses that the associated threshold comprises a session activity level threshold (Column 10, lines 1 – 20).

Regarding claim 17 and 41, Alles discloses a policer that polices packets by reference to programmed traffic parameters (Column 13, lines 10 – 20; Column 11, line 63 – Column 12, line 10).

Regarding claim 22 and 46, Alles discloses a plurality of protocol-specific state machines for a respective plurality of protocol types (Column 10, lines 31 – 32).

Regarding claims 23 and 47, Alles discloses said plurality of protocol-specific state machines include a transport control protocol (TCP) state machine that, responsive to a control command, provides preferential treatment to a particular TCP session (Column 7, line 62 – Column 8, line 3; Column 13, lines 1 – 6).

Regarding claims 24 and 48, the combination of Alles discloses a reporting interface through which the programmable access device reports state information for active sessions to an external processor (Column 8, lines 18 – 29).

Regarding claims 25 and 49, Alles discloses the reporting interface reports the state information for an active session in response to allocation of service to a new external service controller (Column 8, lines 18 – 29).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-21 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alles.

Regarding claims 19-21 and 43-45, Alles does not explicitly indicate that the identified message is SIP, IGMP, or RSVP. Examiner takes Official Notice (see MPEP § 2144.03) that "the message protocol between the message identifier and external processors could be SIP, IGMP, or RSVP because they are simple, well known communication protocols between many independent nodes in a network (Column 9, lines 53 – 58) in a computer networking environment was well known in the art at the time the invention was made. The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding

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the circumstances justifying the judicial notice)." Specifically, In re Boon, 169 USPQ 231, 234 states "as we held in Ahlert, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight

Claims 12-14, 18, 37-38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alles in view of Gai (6167445).

Regarding claims 12 and 37, Alles does not explicitly indicate one or more output buffers for outgoing packets. Gai teaches a plurality of output buffers (Column 2, lines 43 – 46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Gai's teaching on the combination of Alles' system in order to allow priority queuing and allow packets to have different priorities (Gai, Column 2, lines 46 – 57).

Regarding claims 13, the combination of Alles and Gai discloses a scheduler associated with the one or more output buffers that schedules the transmission of outgoing packets within the one or more output buffers (Gai, Column 10, lines 26 – 27).

Regarding claims 14 and 38, Alles discloses the scheduler supports multiple quality of service classes (Column 13, lines 9 – 12).

Regarding claims 18 and 42, the combination of Alles and Gai discloses one or more output buffers for outgoing packets and an associated scheduler that transmits the outgoing packets from the one or more output buffers through the second network interface according to a programmed methodology (Gai, Column 2, lines 44 – 64; Column 10, lines 26 – 37).

Claim 11 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alles in view of Natarajan (6505244).

Regarding claims 11 and 36, Alles not explicitly indicate a fault monitor. Natarajan teaches a policy system in a network node that includes a fault monitor (Column 26, lines 12 – 26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Natarajan's idea for fault monitoring in Alles' system in order to have better feedback for dynamic adjustments to be made incase of bad performance or errors in the system (Column 2, lines 36 – 43).

Claims 3, 28, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alles in view of Amara (6674743).

Regarding claim 3 and 28, Alles does not explicitly indicate that the packet header filter includes packet header filters for each interface port. Amara teaches that the packet header filter is a first packet header filter (Figure 2, elements 102 and 116), and wherein the programmable access device further comprises a second packet header filter that receives packets directly from the second network interface (Figure 2, elements 104 and 118). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a packet classifier attached to each interface

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port as taught in Amara's system in Alles' system in order to allow packets to be identified before any forwarding or switching is performed on them (Column 4, lines 55 – 65).

Regarding claim 50, Alles discloses a device for use in a programmable access device (Column 2, lines 41 – 43) comprising: a first network interface through which packets are communicated with a first network; a second network interface through which packets are communicated with a second network (Figure 3, elements 310 and 320); a message interface coupled to an external processor that is configured to implement policy-based services (Column 10, lines 36 – 47); a policer configured to discard packets determined as nonconforming to a first traffic parameter (Column 10, lines 61 – 63); a packet header filter coupled to the network interfaces and to the message interface, wherein the packet header filter identifies messages, received from the first network interface on which policy based services are to be implements, wherein the packet header filter passes the identified message to the external processor via the message interface (Column 9, lines 53 – 55; Column 10, lines 57 – 59) and passes all other message received from the network interfaces to the policer (Column 10, lines 31 – 32); and a marker configured to discard packets determined as nonconforming to a second traffic parameter (Column 10, lines 61 – 63; Column 13, lines 10 – 20), but Alles does not explicitly indicate that the packet header filter includes packet header filters for each interface port. Amara teaches that the packet header filter is a first packet header filter (Figure 2, elements 102 and 116), and wherein the programmable access device further comprises a second packet header filter that receives packets directly from the

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second network interface (Figure 2, elements 104 and 118). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a packet classifier attached to each interface port as taught in Amara's system in Alles' system in order to allow packets to be identified before any forwarding or switching is performed on them (Column 4, lines 55 – 65).

Response to Arguments

Applicant's arguments with respect to claims 1-50 have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 5920566 issued to Hendel, because it discloses switching elements with external ports and processors.

U. S. Patent No. 6697857 issued to Dixon, because it discloses an access device with an external directory service.

U. S. Patent No. 6539425 issued to Stevens, because it discloses packet filtering for policies to perform on those packets on a separate policy server.

U. S. Patent No. 6321338 issued to Porras, because it discloses monitoring a network for usage violators.

U. S. Patent No. 6424659 issued to Viswanadham, because it discloses a hierarchy of external systems for an access device.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

KB
July 29, 2005


SALEH NAJJAR
PRIMARY EXAMINER